(FILE 'HOME' ENTERED AT 15:49:17 ON 10 MAR 2004)

		MEDLINE, BIOSIS, USPATFULL' ENTERED AT 15:49:28 ON 10 MAR 2004
L1	3	.664 S ACTIVIN RECEPTOR?
L2		31 S (KONDO, S.? OR KONDO S.?)/AU
L3		0 S L1 AND L2
L4	8	568 S ACTIVIN
L5		0 S L2 AND L4
L6	4.0	623 S (MURAMATSU OR KONDO OR ETOH OR SHIBAI OR MURATA OR HASHIMOTO)
L7		35 S L1 AND L6
L8		34 DUP REM L7 (1 DUPLICATE REMOVED)

The present invention relates to kinase assays, and specifically to ΔR novel kinase assay methods using a novel target peptide for measuring the activity and/or modulation of activity of the ActRIIB kinase protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 34 USPATFULL on STN

2003:237863 USPATFULL ACCESSION NUMBER:

TITLE: Receptor polypeptides and their production and uses

Cox, Edward T., Foster City, CA, UNITED STATES INVENTOR (S): Mather, Jennie P., Millbrae, CA, UNITED STATES Sliwkowski, Mary B., San Carlos, CA, UNITED STATES Woodruff, Teresa K., Millbrae, CA, UNITED STATES

Genentech, Inc. (U.S. corporation) PATENT ASSIGNEE(S):

NUMBER KIND DATE

-----PATENT INFORMATION: APPLICATION INFO.:

US 2003166020 A1 20030904 US 2002-192022 A1 20020710 (10) Continuation of Ser. No. US 1993-125065, filed on 21 Sep 1993, GRANTED, Pat. No. US 6455262 Continuation of Ser. No. US 1993-12711, filed on 3 Feb 1993, GRANTED, Pat. No. US 5286654 Division of Ser. No. US RELATED APPLN. INFO.:

1991-716826, filed on 19 Jun 1991, GRANTED, Pat. No. US

5216126 DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GENENTECH, INC., 1 DNA WAY, SOUTH SAN FRANCISCO, CA,

94080 NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 4 Drawing Page(s)

LINE COUNT: 2967 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An isolated TGF-.beta. supergene family (TSF) receptor polypeptide is

provided. This polypeptide preferably is an inhibin/activin receptor polypeptide and has at least 75% sequence identity with

the mature human inhibin/activin receptor sequence.

Also provided is a method for purifying TGF-.beta. supergene family members such as inhibin or activin using the polypeptide, and a method for screening for compounds with TGF-.beta. supergene family member activity by contacting the compound with the polypeptide and detecting if binding has occurred and the compound is active.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 7 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2003:232514 USPATFULL

TITLE: Follistatin-3

INVENTOR (S): Duan, D. Roxanne, Bethesda, MD, UNITED STATES Ruben, Steven M., Brookeville, MD, UNITED STATES

NUMBER KIND DATE

US 2003162715 A1 20030828 US 2003-372874 A1 20030226 (10) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 2000-617804, filed on 14 Jul 2000, GRANTED, Pat. No. US 6537966 Division of Ser. No.

US 1998-141027, filed on 27 Aug 1998, GRANTED, Pat. No. US 6372454

NUMBER DATE

HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, LEGAL REPRESENTATIVE:

ROCKVILLE, MD, 20850

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

5 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 4327

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a novel follistatin-3 protein which is a member of the family of inhibin-related proteins. In particular, isolated nucleic acid molecules are provided encoding the human

follistatin-3 protein. Follistatin-3 polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of follistatin-3 activity. Also provided are diagnostic methods for detecting reproductive system-related disorders and disorders of the regulation of cell growth and differentiation and therapeutic methods for treating reproductive system-related disorders and disorders of the regulation of cell growth and differentiation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 13 OF 34 USPATFULL on STN ACCESSION NUMBER:

2002:227984 USPATFULL

MIMDED

TITLE:

Antibodies which bind specifically to activin

receptor like kinases INVENTOR(S):

Miyazono, Kohei, Uppsala, SWEDEN ten Dijke, Peter, Uppsala, SWEDEN Franzen, Petra, Uppsala, SWEDEN

Yamashita, Hidetoshi, Uppsala, SWEDEN Heldin, Carl-Henrik, Uppsala, SWEDEN

KIND DATE

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

US 2002123139 A1 20020905 US 2001-903068 A1 20010711 (9)

Division of Ser. No. US 2000-679187, filed on 3 Oct 2000, PATENTED Division of Ser. No. US 1995-436265, filed on 30 Oct 1995, PATENTED A 371 of International Ser. No. WO 1993-GB2367, filed on 17 Nov 1993, UNKNOWN

		NUMBER	DATE
PRIORITY	INFORMATION:	GB 1992-24057	19921117
		GB 1993-4677	19930308
		GB 1993-4680	19930308
		GB 1993-11047	19930528
		GB 1993-13763	19930702
		GB 1993-9136099	19930803
		GB 1993-21344	19931015
DOGUDATIAN	my DT.	TT4 2 1 2 4 4 4	

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 666 FIFTH AVE, NEW YORK, NY, 10103-3198

NUMBER OF CLAIMS: 3.1 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 11 Drawing Page(s)

2833 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ΔR

A new receptor family has been identified, of activin-like kinases. Novel Proteins have activin/TGF-.beta.-type I receptor functionality, and have consequential diagnostic/therapeutic utility. They may have a serine/threonine kinase domain, a DFKSRN or DLKSKN sequence in subdomain VIB and/or a GTKRYM sequence in subdomain VIII.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 14 OF 34 USPATFULL on STN

2002:84902 USPATFULL ACCESSION NUMBER:

Nucleic acids, proteins and antibodies TITLE:

Rosen, Craig A., Laytonsville, MD, UNITED STATES INVENTOR(S):

Ruben, Steven M., Olney, MD, UNITED STATES

NUMBER KIND DATE US 2002044941 A1 20020418 PATENT INFORMATION:

US 2003064072 A9 20030403 US 2001-925302 A1 20010810 (9) APPLICATION INFO.:

Continuation-in-part of Ser. No. WO 2000-US5918, filed RELATED APPLN. INFO.:

on 8 Mar 2000, UNKNOWN

NUMBER DATE

PRIORITY INFORMATION: US 1999-124270P 19990312 (60)

Utility DOCUMENT TYPE:

21121

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850 23 NUMBER OF CLAIMS:

EXEMPLARY CLAIM: 1

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel lung cancer related

polynucleotides, the polypeptides encoded by these polynucleotides herein collectively referred to as "lung cancer antigens," and antibodies that immunospecifically bind these polypeptides, and the use of such lung cancer polynucleotides, antigens, and antibodies for detecting, treating, preventing and/or prognosing disorders of the lung, including, but not limited to, the presence of lung cancer and lung cancer metastases. More specifically, isolated lung cancer nucleic acid molecules are provided encoding novel lung cancer polypeptides. Novel lung cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human lung cancer polynucleotides, polypeptides, and/or antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the lung, including lung cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The invention further relates to methods and/or compositions for inhibiting or promoting the production and/or function of the

KIND DATE

polypeptides of the invention. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 15 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2002:48570 USPATFULL

Medicament and method for treating renal disease TITLE:

INVENTOR(S): Kojima, Itaru, Maebashi, JAPAN

PATENT ASSIGNEE(S): AJINOMOTO CO., INC., Tokyo, JAPAN (non-U.S. MILIMBED

corporation)

		NONDER	ICTIVD	DALL	
PATENT INFORMATION:	US	2002028762	A1	20020307	
	US	6599876	B2	20030729	
APPLICATION INFO.:	US	2001-820857	A1	20010330	(9)

NUMBER DATE _____

PRIORITY INFORMATION: JP 2000-97553 20000331

DOCUMENT TYPE: Heility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC. FOURTH

FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 6 Drawing Page(s) LINE COUNT: 451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A medicament for treating a renal disease, comprising a therapeutically effective amount of an activin inhibitor as an active ingredient. Also, a method for treating a renal disease, comprising administering a therapeutically effective amount of an activin inhibitor to a patient suffering from renal disease is disclosed. The activin inhibitor may be

follistatin, an anti-activin antibody, an inhibitor to activin receptor or an anti-activin receptor antibody, an inhibitor to signal transduction relating to

activin receptor, an activin production inhibitor in kidney, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 16 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2002:246543 USPATFULL

Receptor polypeptides and their production and uses TITLE: Cox, Edward T., Foster City, CA, United States INVENTOR(S):

Mather, Jennie P., Millbrae, CA, United States Sliwkowski, Mary B., San Carlos, CA, United States Woodruff, Teresa K., Millbrae, CA, United States

Genentech, Inc., South San Francisco, CA, United States PATENT ASSIGNEE(S): (U.S. corporation)

NUMBER KIND DATE -----US 6455262 B1 20020924 US 1993-125065 19930921 PATENT INFORMATION: APPLICATION INFO.: 19930921 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-12711, filed on 3 Feb 1993, now patented, Pat. No. US 5286654 Division of

Ser. No. US 1991-716826, filed on 19 Jun 1991, now

patented, Pat. No. US 5216126 Utility

DOCUMENT TYPE: FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Kemmerer, Elizabeth

ASSISTANT EXAMINER: DeBerry, Regina M. LEGAL REPRESENTATIVE: Hasak, Janet E.

NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s) LINE COUNT: 3010

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An isolated TGF-.beta. supergene family (TSF) receptor polypeptide is provided. This polypeptide preferably is an inhibin/activin

receptor polypeptide and has at least 75% sequence identity with the mature human inhibin/activin receptor sequence.

Also provided is a method for purifying TGF-.beta. supergene family members such as inhibin or activin using the polypeptide, and a method for screening for compounds with TGF-, beta, supergene family member activity by contacting the compound with the polypeptide and detecting if binding has occurred and the compound is active.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 17 OF 34 USPATFULL on STN ACCESSION NUMBER: 2001:199932 USPATFULL

Cloning and recombinant production of receptor(s) of TITLE:

the activin/TGF-beta superfamily

Mathews, Lawrence S., Ann Arbor, MI, United States INVENTOR (S): Vale, Wylie W., JR., La Jolla, CA, United States

Tsuchida, Kunihiro, San Diego, CA, United States The Salk Institute for Biological Studies. (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2001039036 A1 20011108 APPLICATION INFO.: US 2000-742684 A1 20001219 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-476123, filed on 7 Jun

1995, GRANTED, Pat. No. US 6162896 Continuation-in-part of Ser. No. US 1994-300584, filed on 2 Sep 1994, GRANTED, Pat. No. US 5885794 Continuation of Ser. No.

US 1992-880220, filed on 8 May 1992, ABANDONED Continuation-in-part of Ser. No. US 1991-773229, filed on 9 Oct 1991, ABANDONED Continuation-in-part of Ser.

No. US 1991-698709, filed on 10 May 1991, ABANDONED

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

Stephen E. Reiter, Foley & Lardner, 23rd Floor, 402 LEGAL REPRESENTATIVE:

West Broadway, San Diego, CA, 92101-3542

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

In accordance with the present invention, there are provided novel receptor proteins characterized by having the following domains, reading from the N-terminal end of said protein:

an extracellular, ligand-binding domain,

a hydrophobic, trans-membrane domain, and

an intracellular, receptor domain having serine kinase-like activity.

The invention receptors optionally further comprise a second hydrophobic domain at the amino terminus thereof. The invention receptor proteins are further characterized by having sufficient binding affinity for at least one member of the activin/TGF-.beta. superfamily of polypeptide growth factors such that concentrations of .ltoreq.10 nM of said polypeptide growth factor occupy .gtoreq.50% of the binding sites of said receptor protein. A presently preferred member of the invention superfamily of receptors binds specifically to activing, in preference to inhibins, transforming growth factor-.beta., and other non-activin-like proteins. DNA sequences encoding such receptors, assays employing same, as well as antibodies derived therefrom, are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 18 OF 34 USPATFULL on STN

2001:134015 USPATFULL ACCESSION NUMBER:

NUCLEIC ACID ENCODING FOLLISTATIN-3 TITLE: INVENTOR (S): DUAN, D. ROXANNE, BETHESDA, MD, United States

RUBEN, STEVEN M., OLNEY, MD. United States

	NUMBER	KIND	DATE	
-				
PATENT INFORMATION: U	S 2001014464	A1	20010816	
U	S 6372454	B2	20020416	
APPLICATION INFO.: U	S 1998-141027	A1	19980827	(9)

DATE NUMBER

PRIORITY INFORMATION: US 1997-56248P 19970829 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

HUMAN GENOME SCIENCES INC. 9410 KEY WEST AVENUE,

ROCKVILLE, MD, 20850 NUMBER OF CLAIMS: 28

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Page(s)

LINE COUNT:

4221 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a novel follistatin-3 protein which is a member of the family of inhibin-related proteins. In particular, isolated nucleic acid molecules are provided encoding the human follistatin-3 protein. Follistatin-3 polypeptides are also provided as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of follistatin-3 activity. Also provided are diagnostic methods for detecting reproductive system-related disorders and disorders of the regulation of cell growth and differentiation and therapeutic methods for treating reproductive system-related disorders and disorders of the regulation of cell growth and differentiation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 19 OF 34 USPATFULL on STN

ACCESSION NUMBER:

2001:231357 USPATFULL

TITLE:

Isolated nucleic acid molecules which encode

activin-receptor like kinases,

expression vectors and cells containing these Mivazono, Kohei, Uppsala, Sweden

INVENTOR (S):

ten Dijke, Peter, Uppsala, Sweden Franzen, Petra, Uppsala, Sweden

Yamashita, Hidetoshi, Uppsala, Sweden Heldin, Carl-Henrik, Uppsala, Sweden

PATENT ASSIGNEE(S):

Ludwig Institute for Cancer Research, New York, NY,

United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6331621 B1 20011218 APPLICATION INFO.: US 2000-679187 20001003 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 436265, now abandoned

NUMBER DATE PRIORITY INFORMATION: GB 1992-24057 19921117 GB 1993-4677 19930308 GB 1993-4680 19930308 GB 1993-11047 GB 1993-13763 19930702 GB 1993-9136099 19930803 GB 1993-21344 19931015 DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED PRIMARY EXAMINER: Mertz, Prema ASSISTANT EXAMINER: Prasad, Sarada C

Fulbright & Jaworski, LLP LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

14 Drawing Figure(s); 10 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

1084 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention involves nucleic acid molecules which encode activin like kinases, expression vectors, and cell lines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 20 OF 34 USPATFULL on STN

2001:202406 USPATFULL ACCESSION NUMBER:

Activin receptor-like kinases, TITLE:

proteins having serine threonine kinase domains and

polynucleotides encoding same

Miyazono, Kohei, Uppsala, Sweden INVENTOR(S): ten Dijke, Peter, Uppsala, Sweden

Franzen, Petra, Uppsala, Sweden Yamashita, Hidetoshi, Uppsala, Sweden Heldin, Carl-Henrik, Uppsala, Sweden

Ludwig Institute for Cancer Research, New York, NY, PATENT ASSIGNEE(S):

United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6316217	B1	20011113	
	WO 9411502		19940526	
APPLICATION INFO.:	US 1995-436265		19951030	(8)
	WO 1993-GB2367		19931117	
			19951030	PCT 371 date
			19951030	PCT 102(e) date

			NUMBER	DATE
PRIORITY	INFORMATION:	GB :	1992-24057	19921117
		GB :	1993-4677	19930308
		GB :	1993-4680	19930308
		GB :	1993-11047	19930528
		GB :	1993-13763	19930702
		GB :	1993-16099	19930803
		GB :	1993-21344	19931015
DOCUMENT	TYPE:	Uti.	lity	
FILE SEGN	MENT:	GRAI	NTED	
PRIMARY E	EXAMINER:	Kun	z, Gary L.	
ASSISTANT	EXAMINER:	Land	dsman, Rober	t S.

Fulbright & Jaworski, LLP LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 22

EXEMPLARY CLAIM:

7 Drawing Figure(s); 10 Drawing Page(s) NUMBER OF DRAWINGS: 1114

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A new receptor family has been identified, of activin-like kinases. AB Novel proteins have activin/TGF-.beta.-type I receptor functionality, and have consequential diagnostic/therapeutic utility. They may have a serine/threonine kinase domain, a DFKSRN or DLKSKN sequence in subdomain VIB and/or a GTKRYM sequence in subdomain VIII.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 21 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2001:126126 USPATFULL

Activin like receptor -- Isolated kinase proteins ALK-2, TITLE: ALK-4. ALK-5, and nucleic acid molecules encoding them

Mivazono, Kohei, Uppsala, Sweden INVENTOR(S):

ten Diike, Peter, Uppsala, Sweden Franzen, Petra, Uppsala, Sweden Yamashita, Hidetoshi, Uppsala, Sweden

Heldin, Carl-Henrik, Uppsala, Sweden Ludwig Institute For Cancer Research, New York, NY, PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE ______

US 6271365 B1 20010807 PATENT INFORMATION: APPLICATION INFO.:

US 1999-395115 19990914 (9) RELATED APPLN, INFO.: Continuation of Ser. No. US 1995-436265, filed on 30

Oct 1995

NUMBER DATE GB 1992-24057 19921117 GB 1993-904677 19930308 GB 1993-4680 19930308 PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Mertz, Prema
ASSISTANT EXAMINER: Prasad, Sarada C

LEGAL REPRESENTATIVE: Fulbright & Jaworski, LLP

NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: 1 NUMBER OF DRAWINGS: 14 Drawing Figure(s); 10 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention involves three members of the activin like receptor kinase

family, and the nucleic acids encoding these.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 22 OF 34 USPATFULL on STN ACCESSION NUMBER: 2001:44371 USPATFULL,

Activin receptor-like kinases, TITLE:

ALK-3 and ALK-6, and nucleic acids encoding them

INVENTOR(S): Miyazono, Kohei, Uppsala, Sweden ten Dijke, Peter, Uppsala, Sweden

Franzen, Petra, Uppsala, Sweden Yamashita, Hidetoshi, Uppsala, Sweden Heldin, Carl-Henrik, Uppsala, Sweden

Ludwig Institute for Cancer Research, New York, NY, PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE US 6207814 B1 20010327 US 1999-382256 19990824 (9) PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation of Ser. No. US 436265

NUMBER DATE GB 1992-24057 19921117 GB 1993-4677 19930308 GB 1993-4680 19930308 PRIORITY INFORMATION: GB 1993-11047 19930528 GB 1993-13763 19930702 GB 1993-16099 19930803 GB 1993-21344 19931015

DOCUMENT TYPE:

Granted FILE SEGMENT:

Fitzgerald, David L. PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Fulbright & Jaworski, LLP 5

Utility

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

1,3

NUMBER OF DRAWINGS: 14 Drawing Figure (s); 10 Drawing Page (s)

LINE COUNT: 1073

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to two members of the receptor family referred to as activin-like kinases. These two members are referred to as ALK-3 and

ALK-6. The proteins have activin/TGF-.beta. type I receptor functionality, and may have a serine/threonine kinase domain, a DFKSRN

or DLKSKN sequence in subdomain V1B, and/or a GTKRYM sequence in

subdomain VIII.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 23 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2000:171120 USPATFULL

Recombinant vertebrate activin TITLE:

receptors

INVENTOR(S): Mathews, Lawrence W., Ann Arbor, MI, United States Vale, Jr., Wylie W., La Jolla, CA, United States

Tsuchida, Kunihiro, San Diego, CA, United States PATENT ASSIGNEE(S): The Salk Institute for Biological Studies, La Jolla,

CA, United States (U.S. corporation)

NUMBER KIND DATE US 6162896 20001219

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

US 1995-476123 19950607 (8) Continuation-in-part of Ser. No. US 1994-300584, filed on 2 Sep 1994, now patented, Pat. No. US 5885794 which is a continuation of Ser. No. US 1992-880220, filed on

8 May 1992, now abandoned which is a

continuation-in-part of Ser. No. US 1991-773229, filed on 9 Oct 1991, now abandoned which is a

continuation-in-part of Ser. No. US 1991-698709, filed

on 10 May 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Fitzgerald, David L. PRIMARY EXAMINER:

LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP, Reiter, Stephen E.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 1988

CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB

In accordance with the present invention, there are provided novel

receptor proteins characterized by having the following domains, reading from the N-terminal end of said protein:

an extracellular, ligand-binding domain,

a hydrophobic, trans-membrane domain, and

an intracellular, receptor domain having serine kinase-like activity.

The invention receptors optionally further comprise a second hydrophobic domain at the amino terminus thereof. The invention receptor proteins are further characterized by having sufficient binding affinity for at

least one member of the activin/TGF-.beta. superfamily of polypeptide growth factors such that concentrations of .ltoreq.10 nM of said polypeptide growth factor occupy .gtoreq.50% of the binding sites of said receptor protein. A presently preferred member of the invention superfamily of receptors binds specifically to activins, in preference to inhibins, transforming growth factory-.beta., and other non-activin-like proteins. DNA sequences encoding such receptors, assays employing same, as well as antibodies derived therefrom, are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 24 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2000:18280 USPATFULL

Nucleic acid sequence of senescence asssociated gene TITLE:

Funk, Walter, Hayward, CA, United States INVENTOR (S):

Geron Corporation, Menlo Park, CA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE US 6025194 20000215 US 1997-974180 19971119 (8) PATENT INFORMATION: APPLICATION INFO.:

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Huff, Sheela ASSISTANT EXAMINER: Bansal, Geetha P.

LEGAL REPRESENTATIVE: Earp, David J., Kaster, Kevin

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1.6 4667

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Human gene GC6 is expressed more abundantly in senescent cells than young cells. Isolated, purified, and recombinant nucleic acids and proteins corresponding to the human GC6 gene and its mRNA and protein products, as well as peptides and antibodies corresponding to the GC6 protein can be used to identify senescent cells, distinguish between senescent and young cells, identify agents that alter senescent gene expression generally and GC6 expression specifically; such agents as well as GC6 gene and gene products and products corresponding thereto can be used to prevent and treat diseases and conditions relating to cell senescence.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 25 OF 34 USPATFULL on STN

ACCESSION NUMBER: 2000:15463 USPATFULL

TITLE: Diagnosis of and therapy for hereditary haemorrhagic

telangiectasia Letarte, Michelle, Toronto, Canada INVENTOR (S):

Marchuk, Douglas A., Chapel Hill, NC, United States

McAllister, Kimberly, Durham, NC, United States

PATENT ASSIGNEE(S): Duke University, Durham, NC, United States (U.S.

corporation)

		NUMBER	KIND	DATE
		NOMBER	KIND	DATE
ידואיםייה	INFORMATION.	US 6022687		20000208

US 1995-564496 19951129 (8) APPLICATION INFO.: RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-346129, filed

on 29 Nov 1994 Utility

DOCUMENT TYPE: FILE SEGMENT: Granted

PRIMARY EXAMINER: Horlick, Kenneth R.

Tung, Joyce ASSISTANT EXAMINER:

Fish & Richardson P.C. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS:

12 EXEMPLARY CLAIM:

14 Drawing Figure(s); 16 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

1520 CAS INDEXING IS AVAILABLE FOR THIS PATENT. which includes the steps of:

A method of diagnosing hereditary haemorrhagic telangiectasia (HHT)

obtaining a sample of genomic DNA from a patient or fetus; and

determining whether the DNA contains a mutation in a gene encoding endoglin, betaglycan, TGF-.beta. type I receptor (RI), TGF-.beta. type II receptor (RII), or TGF-.beta./activin type I receptor (TSR-I), such a mutation being an indication that the patient or fetus bears a gene making the patient or fetus susceptible to HHT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 26 OF 34 USPATFULL on STN

1999:36917 USPATFULL ACCESSION NUMBER:

TITLE:

Recombinant production of vertebrate activin

receptor polypeptides and identification of

receptor DNAs in the activin/TGF-.beta. superfamily

INVENTOR(s):

Mathews, Lawrence S., San Diego, CA, United States Vale, Wylie W., La Jolla, CA, United States

PATENT ASSIGNEE(S):

The Salk Institute for Biological Studies, La Jolla,

CA, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5885794 19990323 US 1994-300584 19940902 (8)

APPLICATION INFO.: RELATED APPLN. INFO.:

Continuation of Ser. No. US 1992-880220, filed on 8 May 1992, now abandoned which is a continuation-in-part of

Ser. No. US 1991-773229, filed on 9 Oct 1991, now abandoned which is a continuation-in-part of Ser. No. US 1991-698709, filed on 10 May 1991, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fitzgerald, David L.

LEGAL REPRESENTATIVE: Reiter, Stephen E.Gray Cary Ware & Freidenrich LLP

NUMBER OF CLAIMS: 32 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 6 Drawing Page(s) 1641

LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT.

In accordance with the present invention, there are provided novel receptor proteins characterized by having the following domains, reading from the N-terminal end of said protein:

an extracellular, ligand-binding domain,

a hydrophobic, trans-membrane domain, and

an intracellular, receptor domain having serine kinase-like activity.

The invention receptors optionally further comprise a second hydrophobic domain at the amino terminus thereof. The invention receptor proteins are further characterized by having sufficient binding affinity for at least one member of the activin/TGF-.beta. superfamily of polypeptide growth factors such that concentrations of .ltoreg.10 nM of said polypeptide growth factor occupy .gtoreq.50% of the binding sites of

said receptor protein. A presently preferred member of the invention superfamily of receptors binds specifically to activins, in preference to inhibins, transforming growth factor-.beta., and other non-activin-like proteins. DNA sequences encoding such receptors, assays employing same, as well as antibodies derived therefrom, are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 27 OF 34 USPATFULL on STN

1998:54857 USPATFULL ACCESSION NUMBER:

TITLE: Pharmaceutical composition and method for inhibiting

hair growth by administration of activin or activin

agonists

Mitrani, Eduardo, Newton, MA, United States INVENTOR(S):

Yissum Research Development Co. of the Hebrew PATENT ASSIGNEE(S):

University of Jerusalem, Jerusalem, Israel (non-U.S.

corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 5753612 19980519 APPLICATION INFO.: US 1995-385185 19950207

19950207 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1992-967262, filed

on 27 Oct 1992, now patented, Pat. No. US 5387262 DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Jagannathan, Vasu Saoud, Christine

ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: Foley, Hoaq & Eliot LLP, Vincent, Matthew P., Arnold,

Beth E.

NUMBER OF CLAIMS: 15

EXEMPLARY CLAIM: 1 Drawing Figure(s); 1 Drawing Page(s)

NUMBER OF DRAWINGS: LINE COUNT: 1691

INVENTOR(S):

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Pharmaceutical preparations for controlling proliferation of

ectodermally-derived tissues comprising the specific negative growth factor activin A or an agonist thereof, and their use in methods of

treatment of proliferative conditions and wound repair.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 28 OF 34 USPATFULL on STN

ACCESSION NUMBER: 97:123185 USPATFULL

TITLE: Protection against liver damage by HGF

Roos, Filip, Brisbane, CA, United States Schwall, Ralph, Pacifica, CA, United States

Genentech, Inc., So. San Francisco, CA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5703048 19971230

APPLICATION INFO.: US 1995-452485 19950526 (8)

Continuation of Ser. No. US 1994-310361, filed on 21 RELATED APPLN. INFO.: Sep 1994, now abandoned which is a continuation of Ser.

No. US 1992-968711, filed on 30 Oct 1992, now abandoned which is a continuation-in-part of Ser. No. US

1992-946263, filed on 16 Sep 1992, now abandoned DOCUMENT TYPE: Utility

FILE SEGMENT: Granted PRIMARY EXAMINER: Feisee, Lila ASSISTANT EXAMINER: Lucas, John

LEGAL REPRESENTATIVE: Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

9 Drawing Figure(s); 5 Drawing Page(s) NUMBER OF DRAWINGS:

TIME COUNT: 2062

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods for preventing occurrence or progression of liver damage using hepatocyte growth factor. In the methods, a preventatively effective amount of the hepatocyte growth factor is administered to the patient. The hepatocyte growth factor can be administered, for instance, prior to administering a hepatotoxic therapy to the patient. The hepatocyte growth factor can further be administered with activin or transforming growth factor-beta to prevent liver damage. Compositions comprising hepatocyte growth factor and activin antagonist or transforming growth factor-beta antagonist are

also provided by the invention. CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 29 OF 34 USPATFULL on STN

ACCESSION NUMBER: 97:68570 USPATFULL

Protection against liver damage by HGF TITLE:

INVENTOR(S): Roos, Filip, Brisbane, CA, United States Schwall, Ralph, Pacifica, CA, United States

PATENT ASSIGNEE(S): Genentech, Inc., So. San Francisco, CA, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 1995-419654 APPLICATION INFO.: 19950410 (8) RELATED APPLN. INFO.: Division of Ser. No. US 1994-310361, filed on 21 Sep

1994 which is a continuation of Ser. No. US 1992-968711, filed on 30 Oct 1992, now abandoned which

is a continuation-in-part of Ser. No. US 1992-946263,

19970805

filed on 16 Sep 1992, now abandoned

Utility DOCUMENT TYPE: FILE SEGMENT: Granted

PRIMARY EXAMINER: Feisee, Lila ASSISTANT EXAMINER: Lucas, John

LEGAL REPRESENTATIVE: Merchant, Gould, Smith, Edell, Welter & Schmidt

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 5 Drawing Page(s) 2330

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods for preventing occurrence or progression of liver damage using hepatocyte growth factor. In the methods, a preventatively effective amount of the hepatocyte growth factor is administered to the patient. The hepatocyte growth factor can be administered, for instance, prior to administering a hepatotoxic therapy to the patient. The hepatocyte growth factor can further be administered with activin or transforming growth factor-beta to prevent liver damage. Compositions comprising hepatocyte growth factor and activin antagonist or transforming growth factor-beta antagonist are also provided by the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 30 OF 34 USPATFULL on STN

ACCESSION NUMBER: 96:72864 USPATFULL

Method for predicting and/or preventing preterm labor TITLE: Woodruff, Teresa K., San Bruno, CA, United States INVENTOR (S):

Genentech, Inc., South San Francisco, CA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE
 PATENT INFORMATION:
 US 5545616
 19960813

 APPLICATION INFO:
 US 1994-310609
 19940922
 (8)

 DOCUMENT TYPE:
 Utility
 Utility
 FILE SEGMENT:
 Granted

 PRIMARY EXAMINER:
 Reamer, James H.
 ASSISTANT EXAMINER:
 MacMillan, Keith
 LEGAL REPRESENTATIVE: Hasak, Janet E. NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1842

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

A method is provided for avoiding premature labor in a pregnant mammal comprising administering to said mammal, during labor, but before an infant is to be delivered, an effective amount of an activin antagonist. In one embodiment, the antagonist is follistatin. In another aspect a method is provided for assaying whether a pregnant mammal is in imminent delivery of its fetus in preterm labor comprising contacting a maternal serum sample or amniotic fluid sample of the mammal with a reagent that detects activin A and measuring the level of activin A in the serum or amniotic fluid. In addition, a kit for the assay is provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 31 OF 34 USPATFULL on STN

ACCESSION NUMBER: 95:11593 USPATFULL

Treatment of hyperproliferative epidermal conditions TITLE:

with activin A

INVENTOR(S): Mitrani, Eduardo, Jerusalem, Israel

Yissum Research Development Co., Jerusalem, Israel PATENT ASSIGNEE(S):

(non-U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 5387576 APPLICATION INFO.: US 1992-967262 19950207 19921027 (7)

NUMBER DATE

PRIORITY INFORMATION: IL 1991-99867 19911027

DCCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Draper, Garnette D.
Carlson, K. Cochrane
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds

NUMBER OF CLAIMS: 6

EXEMPLARY CLAIM: NUMBER OF DRAWINGS: 6 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 840

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Pharmaceutical preparations for the treatment of hyperproliferative epidermal conditions comprising the specific negative growth factor activin A, and their use in methods of treatment of hyperproliferative epidermal conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 32 OF 34 MEDLINE on STN ACCESSION NUMBER: 96164252 MEDLINE DOCUMENT NUMBER: PubMed ID: 8596648

DUPLICATE 1

Induction of beta-A activin expression by synaptic activity TITLE .

Department of Neurology, Johns Hopkins University School of

and during neocortical development. Andreasson K: Worley P F Medicine, Baltimore, MD 21205, USA.

EV09374 (NEI) CONTRACT NUMBER:

HD00992 (NICHD)

CORPORATE SOURCE:

Neuroscience, (1995 Dec) 69 (3) 781-96. SOURCE: Journal code: 7605074, ISSN: 0306-4522.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE:

AUTHOR:

English Priority Journals

FILE SEGMENT:

ENTRY MONTH: 199604 ENTRY DATE:

Entered STN: 19960424 Last Updated on STN: 19960424

Entered Medline: 19960418

beta-A activin is a member of the transforming growth factor-beta family AB

and has been implicated in nerve cell survival and inhibition of differentiation in vitro [Hashimoto M. et al. (1990) Biochem. biophys. Res. Commun. 173, 193-200; Schubert D. et al. (1990) Nature 344, 868-870]. In our studies to identify genomic mechanisms involved in long-term neuronal responses to synaptic activity, we have determined that beta-A activin messenger RNA is rapidly and transiently induced in neurons of the adult rat brain by excitatory synaptic input. Synaptic mechanisms involved in beta-A activin messenger RNA induction were examined in adult hippocampus and cortex using the long-term potentiation paradigm. beta-A activin messenger RNA is induced in granule cell neurons of the hippocampus by high-frequency synaptic stimuli that produce long-term potentiation, and this induction is blocked by the N-methyl-D-aspartate type glutamate receptor antagonist, dizocilpine. beta-A activin messenger RNA is expressed at basal levels in neurons of lavers II/III and V/VI, and this expression rapidly decreases following sensory deafferentation of the visual cortex or systemic administration of dizocilpine, suggesting that beta-A activin expression is regulated by physiological excitatory synaptic activity. In developing brain, beta-A activin is expressed in the neocortex and neostriatum beginning at embryonic day 17. beta-A activin expression in late fetal cortex is enriched in postmitotic neurons at the lower boundary of the dense cortical plate. As development progresses, beta-A activin expression continues to be enriched in neurons at the boundary between the hypercellular cortical plate and the subjacent, more mature deep layers. This inside-out progression of beta-A activin expression follows the well-characterized radial gradient of cortical development. Expression of beta-A activin messenger RNA is rapidly regulated in early postnatal cortex and striatum by GABA and glutamate antagonists, suggesting that beta-A activin is also regulated as a rapid response gene in developing brain, and that the high basal levels reflect a steady-state response to developmental signals. activin receptors are enriched in neurons of developing and adult brain [Cameron V. A. et al. (1994) Endocrinology 134, 799-808; Roberts V. J. and Barth S. L. (1994) Endocrinology 134, 914-922], our observations suggest a role for activin signaling in neuronal responses to synaptic and developmental activity. In this study, we analyse the induction of expression of beta-A activin, a member of the transforming growth factor-beta family of secreted peptides, in response to synaptic activity and in the developing brain. The elevated and specific expression of beta-A activin during fetal and early postnatal neocortical development and its later regulation by excitatory activity postnatally and in the adult suggests that the activin signaling pathway functions at multiple developmental stages in the neuroplastic response.

ANSWER 33 OF 34 USPATFULL on STN ACCESSION NUMBER: 94:13452 USPATFULL

TITLE: Detection and purification of activin polypeptide

Cox. Edward T., Foster City, CA, United States INVENTOR(S): Mather, Jennie P., Millbrae, CA, United States

Sliwkowski, Mary B., San Carlos, CA, United States Woodruff, Teresa K., Millbrae, CA, United States Genentech, Inc., S. San Francisco, CA, United States

(U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5286654 19940215

US 1993-12711 19930203 (8) APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 1991-716826, filed on 19 Jun

1991, now patented, Pat. No. US 5216126

Utility DOCUMENT TYPE:

Granted FILE SEGMENT:

PRIMARY EXAMINER: Chan, Y. Christina
ASSISTANT EXAMINER: Adams, Arnold E.
LEGAL REPRESENTATIVE: Hasak, Janet E.

PATENT ASSIGNEE(S):

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s)

LINE COUNT: 2945

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An isolated TGF-.beta. supergene family (TSF) receptor polypeptide is provided. This polypeptide preferably is an inhibin/activin receptor polypeptide and has at least 75% sequence identity with

the mature human inhibin/activin receptor sequence.

Also provided is a method for purifying TGF-.beta. supergene family members such as inhibin or activin using the polypeptide, and a method for screening for compounds with TGF-.beta. supergene family member activity by contacting the compound with the polypeptide and detecting if binding has occurred and the compound is active.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 34 OF 34 USPATFULL on STN

ACCESSION NUMBER: 93:44360 USPATFULL

Receptor polypeptides and their production and uses TITLE: INVENTOR (S): Cox, Edward T., Foster City, CA, United States

Mather, Jennie P., Millbrae, CA, United States Sliwkowski, Mary B., San Carlos, CA, United States

Woodruff, Teresa K., Millbrae, CA, United States Genentech, Inc., South San Francisco, CA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE US 5216126 19930601 PATENT INFORMATION: US 1991-716826 APPLICATION INFO.: 19910619 (7)

Utility DOCUMENT TYPE: FILE SEGMENT: Granted PRIMARY EXAMINER: Chan, Y. Christina ASSISTANT EXAMINER: Adams, Donald E.

LEGAL REPRESENTATIVE: Hasak, Janet E. NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

AB

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 4 Drawing Page(s) LINE COUNT:

2843 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An isolated TGF-.beta. supergene family (TSF) receptor polypeptide is provided. This polypeptide preferably is an inhibin/activin receptor polypeptide and has at least 75% sequence identity with

the mature human inhibin/activin receptor sequence. Also provided is a method for purifying TGF-.beta. supergene family members such as inhibin or activin using the polypeptide, and a method for screening for compounds with TGF.beta. supergene family member activity by contacting the compound with the polypeptide and detecting if binding has occurred and the compound is active.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Number Hits Search Text 5 (Mathews.in. or Vale.in. or Tsuchida.in.)	USPAT:	2004/03/10 16:28
and activin adj1 receptor?	US-PGPUB; EPO; DERWENT	2004/03/10 16:28
59 activin adj1 receptor?	USPAT; US-PGPUB; EPO;	2004/03/10 16:50

	υ	1	Document ID	Issue Date	Pages	Title	Current OR
1			US 20010039036 A1	20011108	33	Cloning and recombinant production of receptor(s) of the activin/TGF-beta superfamily	435/69.1
2	×		US 20010049360 A1	20011206	22	Betaglycan as an inhibin receptor and uses thereof	514/44
3	×		US 5885794 A	19990323	28	Recombinant production of vertebrate activin receptor polypeptides and identification of receptor DNAs in the activin/TGFbeta. superfamily	435/69.1
4	×		US 6162896 A	20001219	33	Recombinant vertebrate activin receptors	530/350
5	0		US 6692744 B2	20040217	19	Betaglycan as an inhibin receptor and uses thereof	424/158.1

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
1	435/4; 530/350; 530/388.1		Mathews, Lawrence S. et al.	×		0	0			
2	424/130.1		Vale, Wylie et al.	0	0		0			
3	435/252.3; 435/254.11; 435/320.1; 435/325; 435/6; 536/23.5; 536/24.31		Mathews, Lawrence S. et al.	0		0				
4	435/69.1; 530/395		Mathews, Lawrence W. et al.							
5	530/350; 530/387.9; 530/388.1; 530/389.1		Vale, Wylie et al.	⊠		0			0	

		mage Doc. Displayed	PT
1	US	20010039036	
2	US	20010049360	
3	US	5885794	
4	us	6162896	
5	US	6692744	

	υ	1	Document ID	Issue Date	Pages	Title	Current OR
1		0	EP 1132472 A1	20010912	61	NOVEL PROTEIN AND UTILIZATION THEREOF	
2			EP 771873 A2	19970507	40	Neuronal cell-specific receptor protein	
3			US 20010039036 A1	20011108	33	Cloning and recombinant production of receptor(s) of the activin/TGF-beta superfamily	435/69.1
4			US 20010049360 A1	20011206	22	Betaglycan as an inhibin receptor and uses thereof	514/44
5			US 20020137133 A1	20020926	41	Receptor proteins	435/69.1
6	×		US 20020157126 A1	20021024	86	Use of follistatin to increase muscle mass	800/18
7			US 20020160478 A1	20021031	88	Short peptides which selectively modulate the activity of protein kinases	435/184
8			US 20020164647 Al	20021107	19	Protein-protein interactions	435/7.1
9			US 20030060398 A1	20030327	23	Neuronal rescue agent	514/2
10			US 20030082233 A1	20030501	22	Method and composition for modulating bone growth	424/484
11			US 20030096296 A1	20030522	87	Use of a BMP protein receptor complex for screening bone metabolism actives and cells co-transfected with a type II BMP receptor and a type I BMP receptor	435/7.1
12			US 20030103950 A1	20030605	13	Cell	424/93.21
13		0	US 20030103959 A1	20030605	15	Methods of providing neuroprotection and/or neurorestoration via the neural activin type IIB receptor	424/94.63
14			US 20030119072 A1	20030626	37	Methods for modulating signal transduction mediated by TGF-beta related proteins	435/7.2

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
1			SUGINO, HIROSHI	×						
2			SUGINO, HIROMU et al.	×						0
3	435/4; 530/350; 530/388.1		Mathews, Lawrence S. et al.	×	0					
4	424/130.1		Vale, Wylie et al.	⊠						
5	435/320.1; 435/325; 530/350; 536/23.5		Wozney, John M. et al.	Ø	0		0			
6	530/350		Lee, Se-Jin et al.							
7	530/317		Ben-Sasson, Shmuel A.	Ø	0		0			0
8			Cimbora, Daniel M. et al.	×		0		0		
9			Gluckman, Peter David et al.	×						
10	424/146.1		Lyons, Karen M. et al.	×			0	0		
11	435/194; 435/320.1; 435/325; 435/69.1; 536/23.2		Rosenbaum, Jan Susan	×						0
12	435/366		Sharpe, Paul Thomas	⊠		0				
13			Hughes, Paul E. et al.	×						
14	514/17		Hoekstra, Merl F. et al.	×	0		0			

	I	mage Doc. Displayed	PT
1		1132472 A1	
2	EP	771873 A2	
3	US	20010039036	
4	US	20010049360	
5	US	20020137133	
6	US	20020157126	
7	US	20020160478	
8	US	20020164647	
9	us	20030060398	0
10	US	20030082233	
11	us	20030096296	
12	US	20030103950	
13	US	20030103959	
14	us	20030119072	0

	σ	1	Document ID	Issue Date	Pages	Title	Current OR
15			US 20030139366 A1		40	Inhibition of Smad3 to prevent fibrosis and improve wound healing	514/44
16		0	US 20030144203 A1	20030731	29	Methods for slowing senescence and treating and preventing diseases associated with senescence	514/12
17		0	US 20030166020 A1	20030904	33	Receptor polypeptides and their production and uses	435/7.21
18	×		US 20030170742 A1	20030911	128	Polynucleotides and polypeptides associated with the development of rheumatoid arthritis	435/7.2
19	0		US 20030207263 A1	20031106	28	Method of screening therapeutic agents	435/6
20			US 20030211589 A1	20031113	32	Short peptides from the b4 and b5 regions kinases which selectively modulate protein activity	435/194
21	×	0	US 20030219846 A1	20031127	8	Assay for activity of the ActRIIB kinase	435/15
22	×		US 5216126 A	19930601	32	Receptor polypeptides and their production and uses	530/350
23	×	0	US 5286654 A	19940215	33	Detection and purification of activin polypeptide	436/501
24	×		US 5453492 A	19950926	16	60 kDa transforming growth factorbetabinding protein and its use to detect or purify TGFbeta.	530/413
25	×	0	US 5545616 A	19960813	23	Method for predicting and/or preventing preterm labor	514/8
26	×		US 5654404 A	19970805	29	Protection against liver damage by HGF	530/387.3

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
15	514/12		Roberts, Anita B. et al.	⊠						
16	514/15; 514/16; 514/17		Bowen, Richard L.	⊠						
17	435/320.1; 435/325; 435/69.1; 514/12; 530/350; 530/388.22		Cox, Edward T. et al.	×					0	
	536/23.5									
18	514/1		Carman, Julie et al.							
19	435/7.23		Dennler, Sylviane Gabrielle Nadine et al.	×	0		0			
20	424/94.5; 435/320.1; 435/325; 435/69.1; 435/70.21; 530/388.26	COUNTY OF STATE OF ST	Ben-Sasson, Shmuel							
21			Krasney, Philip A. et al.	0		0	0			
22	530/388.22 ; 530/389.1		Cox, Edward T. et al.					0		
23	436/536; 530/388.22 ; 530/395; 530/413		Cox, Edward T. et al.					0		
24	435/7.1; 530/350; 530/395; 530/402		Butzow, Ralf et al.							
25	514/2		Woodruff, Teresa K.							
26	424/134.1; 424/136.1; 424/178.1; 530/350	TO THE PARTY PROPERTY OF THE PARTY OF THE PA	Roos, Filip et al.							

	I	mage Doc. Displayed	PT
15	us	20030139366	
16	US	20030144203	
17	us	20030166020	
18	us	20030170742	0
19	us	20030207263	
20	US	20030211589	
21	US	20030219846	
22	us	5216126	
23	US	5286654	
24	US	5453492	
25	US	5545616	
26	US	5654404	0

	σ	1	Do	cument ID	Issue Date	Pages	Title	Current OR
27			US A	5658876	19970819	18	Activin antagonists as novel contraceptives	514/2
28	×		US A	5703048	19971230	26	Protection against liver damage by HGF	514/12
29	×		US A	5766863	19980616	111	Kinase receptor activation assay	435/7.21
30			US A	5807713	19980915	30	DNA encoding growth/differentiation factor	435/69.5
31	Ø		US A	5824637	19981020	18	Activin antagonists as novel contraceptives	514/2
32	×		US A	5831050	19981103	31	Morphogen cell surface receptor	536/23.5
33	Ø		US A	5861479	19990119	31	Morphogen cell surface receptor	530/324

	Current XRef	Retrieval Classif	Inventor	s	C	P	2	3	4	5
27	514/12; 514/21; 514/841; 514/843		Crowley, William F. et al.	⊠	0					
28	435/360; 514/2; 514/838; 514/893; 514/894; 530/350; 530/399		Roos, Filip et al.							
29	435/6; 435/69.1; 435/7.4; 435/7.94; 435/975; 436/518; 436/531; 436/531; 436/548; 530/388.26; 530/388.26; 530/389.6; 530/391.3		Godowski, Paul J. et al.							
30	435/252.3; 435/320.1; 435/325; 435/419; 435/71.1; 536/23.1; 536/23.5		Hotten, Gertrud et al.							
31	514/12; 514/13; 514/21; 514/841; 514/843		Crowley, William F. et al.							0
32	530/350; 530/395; 536/24.31; 536/24.33		Jin, Donald F. et al.	0					0	0
33	435/6; 435/7.23; 530/399; 536/23.5; 536/23.51; 536/24.33		Jin, Donald F. et al.							

	I	mage Doc. Displayed	PΊ
27		5658876	
28	US	5703048	
29	US	5766863	
30	us	5807713	
31	US	5824637	
32	us	5831050	
33	us	5861479	

	ט	1	Do	cument ID	Issue Date	Pages	Title	Current OR
34			US A	5885794	19990323	28	Recombinant production of vertebrate activin receptor polypeptides and identification of receptor DNAs in the activin/TGFbeta. superfamily	435/69.1
35	×		us A	5891650	19990406	112	Kinase receptor activation assay	435/7.21
36			US A	5914237	19990622	111	Kinase receptor activation assay	435/7.21
37	Ø	0	US A	5981483	19991109	42	Compositions comprising modulators of cytokines of the TGFbeta. superfamily	514/12
38			US A	6004937	19991221	6	Use of follistatin to modulate growth and differentiation factor 8 [GDF-8] and bone morphogenic protein 11 [BMP-11]	514/21
39			US A	6093547	20000725	31	Morphogen cell surface receptor and screening for morphogen analogs	435/7.1

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
34	435/252.3; 435/254.11; 435/320.1; 435/325; 435/6; 536/23.5; 536/24.31		Mathews, Lawrence S. et al.			0				
35	435/15; 435/7.4; 435/7.94; 436/501; 436/518; 436/531; 436/548; 530/388.22; 530/388.26; 530/389.6		Godowski, Paul J. et al.							
36	435/15; 435/7.4; 435/7.94; 436/501; 436/518; 436/531; 436/548; 530/388.22; 530/388.26; 530/389.6		Godowski, Paul J. et al.							
37	514/2; 514/8; 514/885; 530/350		Dennis, James W. et al.		0	0	0	0	0	0
38	435/252.3; 435/320.1; 435/69.1; 435/69.4; 514/8; 530/350; 530/397; 530/399; 536/23.1; 536/23.51; 536/24.33		Wood, Clive R. et al.							
39	435/7.2; 435/810; 435/975	787 187 887 777 (1887 777)	Jin, Donald F. et al.		0			0		0

	т	mage Doc.	_
		Displayed	PT
34	us	5885794	
35	US	5891650	
36	US	5914237	
37	us	5981483	
38	us	6004937	
39	US	6093547	

	υ	1	Do	cument ID	Issue Date	Pages	Title	Current OR
40	×		US A	6132988	20001017	47	DNA encoding a neuronal cell-specific receptor protein	435/69.1
41			US A	6162896	20001219	33	Recombinant vertebrate activin receptors	530/350
42			US B1	6171584	20010109	43	Method of treatment with growth/differentiation factors of the TGFbeta. family	424/85.1
43	×		US B1	6210899	20010403	85	Use of a BMP protein receptor complex for screening bone metabolism actives and cells co-transfected with a type II BMP receptor and type I BMP receptor	435/7.1
44	×		US B1	6287784	20010911	119	Kinase receptor activation assay	435/7.1
45	⊠		US B1	6291206	20010918	38	BMP receptor proteins	435/69.1
46	⊠		US B1	6294335	20010925	12	Method of diagnosing abnormal cell growth	435/6

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
40	435/252.1; 435/320.1; 435/325; 536/23.1; 536/23.5		Sugino, Hiromu et al.	_						
41	435/69.1; 530/395		Mathews, Lawrence W. et al.	×						
42	435/252.3; 435/320.1; 435/325; 435/471; 435/69.5; 435/71.1; 514/12; 514/8; 536/23.1; 536/23.5; 536/24.1; 536/24.31		Hotten, Gertrud et al.							
43	435/7.2; 435/7.93; 436/501; 530/350		Rosenbaum, Jan Susan					0		
44	435/15; 435/194; 435/325; 435/69.1; 435/7.2		Godowski, Paul J. et al.							
45	435/252.3; 435/254.11; ; 435/320.1; 435/325; 536/23.1; 536/23.5; 536/23.51		Wozney, John M. et al.							
46	435/252.3; 435/254.11; 435/320.1; 435/325; 435/69.1; 536/23.1; 536/23.5		Risbridger, Gail Petuna et al.		The state of the s		0	The state of the s	D	

		mage Doc. Displayed	PT
40	US	6132988	
41	US	6162896	
42	US	6171584	
43	US	6210899	
44	US	6287784	
45	us	6291206	
46	US	6294335	

	σ	1	Do	cument ID	Issue Date	Pages	Title	Current OR
47	×		US B1	6306622	20011023	61	cDNA encoding a BMP type II receptor	435/69.1
48	×		US B1	6407060	20020618	41	Method for enhancing functional recovery following central nervous system ischemia or trauma	514/12
49	⋈		US B1	6455262	20020924	31	Receptor polypeptides and their production and uses	435/7.1
50	×		US B2	6610513	20030826	37	Receptor proteins	435/69.1
51	Ø		US B1	6642362	20031104	82	Genes coding proteins for early liver development and their use in diagnosing and treating liver disease	530/388.23
52	×		US B1	6656475	20031202	77	Growth differentiation factor receptors, agonists and antagonists thereof, and methods of using same	424/198.1
53			US B	6686198	20040203	22	Inducing and maintaining neuronal stem cells by preventing or antagonizing a signal pathway in a cell for a growth factor of the TGF-beta family, useful for treating Alzheimer's disease, Parkinson's disease and multiple sclerosis	
54	⋈		US B1	6686198	20040203	22	Method of inducing and maintaining neuronal cells	435/377
55			US B2	6692744	20040217	19	Betaglycan as an inhibin receptor and uses thereof	424/158.1

	Current XRef	Retrieval Classif	Inventor	s	С	P	2	3	4	5
47	435/320.1; 435/325; 435/365; 530/350; 536/23.1; 536/23.5		Rosenbaum, Jan Susan et al.			0				
48	514/21; 530/324; 530/350		Charette, Marc F. et al.			0	_	0		
49	435/7.2; 436/501		Cox, Edward T. et al.	0	0			0	0	
50	435/320.1; 435/325; 530/350; 536/23.2; 536/23.5		Wozney, John M. et al.							
51	530/387.9; 530/389.1; 530/389.2		Mishra, Lopa							
52	514/2; 530/350		Lee, Se-Jin et al.	0						
53			HEMMATI-BRIVANLOU, A et al.	⊠						
54	435/325; 435/375		Melton, Douglas A. et al.							0
55	530/350; 530/387.9; 530/388.1; 530/389.1		Vale, Wylie et al.	⊠						

		mage Doc. Displayed	PT
47	US	6306622	0
48	US	6407060	
49	US	6455262	
50	US	6610513	
51	US	6642362	
52	US	6656475	
53	US	6686198	
54	US	6686198	0
55	US	6692744	

*	σ	i	Document ID	Issue Date	Pages	Title	Current	OR
56	×		WO 200131004 A	20030520	8.3	New brain protein with affinity to activin receptors for treatment and prevention of brain and nerve disorders, such as Alzheimer's disease, Parkinson's disease and Huntington's disease		
57			WO 2003006057 A	20030123	NA	Treatment and/or prophylaxis of a disease associated with fibrosis such as ulcerative colitis, Crohn's Disease, liver fibrosis or cirrhosis, in a vertebrate, comprises using an activin antagonist		
58	0		WO 9507982 A1	19950323	83	ACTIVIN RECEPTORS-LIKE KINASE (ALK), BELONGING TO THE TGF RECEPTOR FAMILY AND/OR TO THE BMP RECEPTOR FAMILY		
59			WO 9611259 A1	19960418	58	TGF- beta 1, ACTIVIN RECEPTORS 1 AND 3		

	Current XRef	Retrieval Classif	Inventor	S	С	P	2	3	4	5
56			SUGINO, H							
57			DE KRESTER, D et al.	Ø						
58			WOZNEY, JOHN M et al.	Ø						
59			HE, WEI WU et al.	Ø						

		mage Doc. Displayed	PT
56	WO A1	200131004	
57			
58	wo	9507982 A1	
59	WO	9611259 A1	